

WHAT IS CLAIMED IS:

1. In a method of in-mold handle attachment wherein a portion of a blow-molded container is formed about a retaining member on the handle during blow-molding, the improvement comprising:

after forming the container portion about the retaining member,
directing a cooling medium at the location of the container portion in order to accelerate the cooling rate at the portion.

2. The method of claim 1, wherein the cooling medium is air directed at the portion from within the blow-molded container.

3. The method of claim 1, wherein the blow-molded container is axially stretched by a stretch rod and wherein the stretch rod includes at least one port for directing the cooling medium at the container portion.

4. The method of claim 1, wherein the cooling medium is directed at the container portion while the container is held against a mold cavity.

5. The method of claim 1, wherein a blow-molding step includes injecting an expansion medium to form the blow-molded container and hold the container in contact with a mold cavity, followed by injecting the cooling medium and enabling a partial exhaust to promote flow of the cooling medium at the container portion while maintaining the container in contact with the mold cavity.

6. The method of claim 5, wherein the step of applying the cooling medium and partial exhaust is followed by applying a rapid exhaust prior to removal of the container from the mold cavity.

7. An improved method of in-mold handle attachment, wherein a portion of a blow-molded container is formed about a retaining member on the handle during blow-molding in a mold cavity, the improvement comprising:

reducing the time for cooling the blow-molded container in the mold cavity by directing a cooling medium at the container portion in order to accelerate the rate at which the container portion is cooled.

8. An improved blow-molding apparatus of the type including a stretch rod and blow-molding cavity, the improvement comprising:

the stretch rod having at least one port for directing a cooling medium against a portion of a blow-molded container formed about a handle in the blow-molding cavity.

9. The apparatus of claim 8, including a partial exhaust for promoting flow of the cooling medium at the container portion.

10. The apparatus of claim 8, including:
 at least one high-pressure source for supplying an expansion medium during blow-molding and for supplying the cooling medium; and
 an exhaust promoting a flow of the cooling medium in the blow-molding cavity.

11. The apparatus of claim 10, including at least one low-pressure source for supplying a low-pressure expansion medium during a preliminary expansion step.

12. The apparatus of claim 11, wherein the exhaust includes a slow exhaust for promoting flow of the cooling medium and a rapid exhaust for exhausting the blow-molding expansion medium.

13. A stretch rod for use in a blow-molding cavity, the stretch rod including at least one port located at at least one select location for directing a cooling medium against a portion of a blow-molded container formed about a handle in the blow-molding cavity.